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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,561	08/05/2003	Michael J. Britton	CM05023H	6018

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EXAMINER	
CHERY, DADY	
ART UNIT	**PAPER NUMBER**
2616	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	04/24/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/24/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/634,561	BRITTON ET AL.	
	Examiner	Art Unit	
	Dady Chery	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 -18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 6,222,850, hereinafter Johnson) in the view of Taketsugu (US patent 5,740,167, hereinafter Taketsugu).

Regarding 1, Johnson discloses a method of transmitting data on a data channel and tracking when the number of collisions on the data channel reaches a threshold value (Col.4, lines 62 – col. 5, lines 4). But, Johnson fails to teach the selection of a new channel when the number of collision reaches a predetermined value.

However, Taketsugu teaches a method to select a new data channel when the packet collisions exceed a critical value as described the instant application (Col. 12, lines 36 – 39).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to select a new channel when the number collisions exceed the threshold value for the purpose of decreasing the rate error of the packet received at the base station (Abstract).

Regarding claim 2,Johnson discloses all the limitation of claim except *the reassignment request is transmitted to a central processor.*

However, Taketsugu teaches the reassignment is done by the base station, which is considered having a central processor (Col. 7, lines 24 – 27).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit the reassignment to a central processor for an efficiency control of the error rate (Abstract)..

Regarding claim 3,Johnson discloses all the limitation of claim 3 except *the reassignment request is transmitted on a control channel.*

However, Taketsugu discloses the reassignment request is transmitted on a control channel (Abstract). The base station responses to user request on the control channel (control mode) when the base receives packets f with a high error rate due to collision as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the control channel for reassignment request for the purpose of decreasing error rate in the transmission packet due to collision (Abstract).

Regarding claim 4. Johnson discloses all the limitation of claim *except the step of transmitting any remaining data on the new data channel upon receipt of a reassignment grant.*

However, Taketsugu teaches a method for the mobile station to shift to a polling access when the data rate exceeds a predetermined threshold (Col. 4, lines 47 –50). Then the mobile select a new transceiver (channel) to send its packet (col.4, lines 59 – 65). This is substantially the same function of the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to send any remaining data upon selecting the new channel for efficiency flow of control (Col. 4, lines 59 –67).

Regarding claim 5, Johnson discloses *the threshold value is known a priori* (Col.4, lines 39 – 45). The threshold value is set by the user base on certain conditions that already known by the user.

Regarding claim 6, Johnson discloses *the threshold value is user configurable* (Col. 4, lines 39 –40).

5. Claims 7 –9,12,13 and 15– 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taketsugu in the view of Cai (US application 20038/0235178, hereinafter Cai).

Regarding claim 7, Taketsugu discloses a method a method of assigning a new channel in case of packet receives from a channel has a high error rate (abstract). Taketsugu further discloses is the collisions exceed a critical value the terminal will assign a new channel (Col. 12, lines 37 –49) as described by the instant application.

Taketsugu fails to teach if the reassignment request is due to the fact the first data channel is loaded.

However, Cai teaches a method of requesting a new channel in case of the first data channel is heavily loaded (Page 1, [003]).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to assign the new channel in case of the first data channel is loaded for the purposes of rational utilization ratio of the channel (Page 1, [003]).

Regarding claim 8, Taketsugu discloses comparing the incoming data rate to a value (Col. 5, lines 1 – 3). Where the comparison of the data rate error with a threshold is substantially the same as comparison the data rate with a value. The comparison is done by the base station, which is considered having a central processor.

Taketsugu fails to teach the measurement is done at the time the subscriber requested the reassignment and if the data rate is lower than the value determine that the first channel is not loaded.

However, Cai teaches a request procedure during a transmission of data on channel and if the less amount of data is transmitted during that request the channel is considered as not loaded (Page 1, [003]), which is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to measure the data rate and determine the channel is not loaded if the value is lower then the predetermined value for the purpose of configuring and assigning the channel efficiently (Abstract).

Regarding claim 9, Taketsugu discloses the value is predetermined threshold value (Col.5, lines 1 –3). .

Regarding claim 12, Taketsugu discloses comparing the incoming data rate to a value (Col. 5, lines 1 – 3). Where the comparison of the data rate error with a threshold is substantially the same as comparison the data rate with a value. The comparison is done by the base station, which is considered having a central processor.

Taketsugu fails to teach the measurement is done at the time the subscriber requested the reassignment and if the data rate is not significantly lower than the value determine that the first channel is loaded.

However, Cai teaches a request procedure during a transmission of data on channel and if the data rate of a channel is very large and the bandwidth cannot satisfy the requirement transmission of data during that request the channel is considered as loaded (Page 1, [003]), which is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to measure the data rate and determine the channel is not loaded if the value is lower then the predetermined value for the purpose of configuring and assigning the channel efficiently (Abstract).

Regarding claim 13, Taketsugu discloses the value is predetermined threshold value (Col.5, lines 1 –3).

Regarding claim 15, Taketsugu discloses *the step of reassigning the subscriber to a new data channel* (Col. 7, lines 21 –37).

Regarding claim 16, Taketsugu discloses a method when the error rate is above a threshold to select a new data channel, which implies the new channel, is not loaded (fig. 6,items 600 and 601, Fig: 7,items 302 and 700 and Col. 7, lines 24 – 37).

Regarding claim 17, Taketsugu discloses *the step of reassigning the subscriber to the first data channel* (Col. 12, lines 36 – 39). It is inherent to reassign the first available channel.

Regarding claim 18, Taketsugu discloses *the step of sending a busy signal to the subscriber when all data channels are determined to be loaded* (Col. 4, lines 24 – 29). Where the base sends the busy signal to the subscriber when all the forward channels are loaded.

Claims 10, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taketsugu in the view of Cai and further view of Johnson.

Regarding claims 10 and 14 Taketsugu combine with Cai disclose the reassignment channel. But, they fail to disclose *the value is an average of previously received incoming data rates at which other subscribers have requested reassignment from the first channel.*

However, Johnson teaches the threshold value is base on a count which the average of the counts for difference time period (Col. 5, lines 10 – 49). Which is the same function as described by the instant application.

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to consider the value as an average of received incoming data rate to indicate the current state of the network (Col. 5, lines 15 –16).

Regarding claim 11, Taketsugu discloses the step of, *if the incoming data rate is significantly lower than the value, disregarding the incoming data rate at which the reassignment request was received* (Col. 5, lines 35 –42). If the data rate is below the threshold R1 the mobile entering the random access mode is considered as substantially the same as the function describes by the instant application.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tsien et al. (US Application 2005/0007979) discloses a Method of Selecting a Dynamic Frequency.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dady Chery whose telephone number is 571-270-1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm ESt.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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RICKY Q. NGO
SUPERVISORY PATENT EXAMINER